Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of claims:

1. (currently amended) A version control system for managing multiple versions of the same file being used in software development, the version control system comprising:

a) a central server device comprising a processor and computer readable medium adapted to store a repository of at least one set of data for obtaining a plurality of versions of a file, said central server device also being adapted to control all modifications to said data and to create new versions of said file;

b) a proxy server device comprising a processor and computer readable medium, said proxy server device being connected to said central server device, said proxy server device including a read-only proxy cache adapted to store copies of currently and previously accessed ones of said plurality of versions obtained from said repository through communication with said central server device, said proxy server device also being adapted to provide a requested version from said read-only proxy cache when available and by requesting said requested version from said central server device otherwise; and

c) at least one client device comprising a processor and computer readable medium, said at least one client device being connected to said proxy server device, said at least one client device comprising a version manager adapted to generate requests for a copy of said requested version through said proxy server device to reduce network traffic between said proxy server device and said central server device and to reduce load on said central server device.

2. (currently amended) A version control system according to claim 1 further comprising a plurality of branches and a plurality of proxy server devices each comprising a processor and computer readable medium servers; wherein, for a first branch of said plurality of branches, said central server device is adapted to store a list of proxy server devices servers selected from said plurality of proxy server devices servers and associated with said first branch; and wherein the version control system is configured to send an update to notify each proxy server device in the list when a change is made to said first branch.

3. (currently amended) A version control system according to claim 1, wherein said central server device includes an access control system adapted to validate requests received

by said central server <u>device</u>.

4. (canceled)

5. (canceled)

6. (currently amended) A version control system according to claim 1, wherein the at least one client <u>device</u> is adapted to modify the repository through said central server <u>device</u>.

7. (currently amended) A version control system according to claim 6, wherein the central server <u>device</u> includes a checkout mechanism for controlling modification to the repository.

8. (currently amended) A version control system according to claim 7, wherein the central server <u>device</u> includes a log of changes made to the repository.

9. (currently amended) A version control system according to claim 8, wherein the log is used to update said proxy server <u>device</u> after a disruption to the connection between the proxy server <u>device</u> and the central server <u>device</u>.

10. (currently amended) A version control system according to claim 1 further comprising a plurality of chained together proxy <u>server devices each comprising a processor and computer readable medium and being</u> ~~servers~~ adapted to serve a geographical area, wherein each proxy server <u>device</u> of said plurality of chained together proxy <u>server devices</u> ~~servers~~ is connected to at least one client <u>device</u>, said plurality of chained together proxy <u>server devices</u> ~~servers~~ each being connected to one proxy server <u>device</u>, said one proxy server <u>device</u> being connected to said central server <u>device</u>;
wherein updates from the central server <u>device</u> to the plurality of chained together proxy servers are first sent to the one proxy server <u>device</u>.

11. (previously presented) A method of modifying a repository of multiple versions of the same file in a version control system used in software development, said version control system

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including a central server and a first interconnected client interconnected to said central server through a first intervening proxy, a second client, and a second proxy, said method comprising the following steps:

a) the first interconnected client requesting from the central server, through the first intervening proxy, a lock on a requested version of a file in the version control system, said requested version being one of a plurality of versions of said file recoverable from a set of data stored in a repository at said central server;

b) the central server checking whether the requested version is unlocked and, if the requested version is unlocked, granting the request of said first interconnected client through said first intervening proxy;

c) the central server sending an update to said second client and to said second proxy notifying the second client of the granting of the request.

12. (previously presented) A method according to claim 11, wherein said lock permits only said first interconnected client to modify said version of said file.

13. (previously presented) A method according to claim 11, further comprising the step of said first interconnected client performing modification to said version of said file and returning the modification to said central server through said first intervening proxy.

14. (previously presented) A method according to claim 13, further comprising the step of said central server sending said modification to said second client and to said second proxy.

15. (currently amended) A central server device in a version control system used in software development configured manage multiple versions of the same file, the version control system including a proxy server device having a read-only cache and connecting a client device to the central server device, the central server device comprising the following:

a) a computer readable medium providing a repository of at least one set of data for obtaining a plurality of versions of a file used in said software development;

b) a processor configured to execute computer executable instructions for running a version manager adapted to provide a requested version of said file from said repository to said proxy server device and adapted to control modifications to said data and to create new versions of said file;

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c) computer executable instructions for running an access control system adapted to manage a request from the client device to modify the contents of said repository; and

d) a memory structure adapted to store a log of modifications made to the contents of said repository and adapted to store a list of portions of said repository also being stored in the read-only cache of the proxy server.

16. (currently amended) A central server device according to claim 15, wherein said log is used to update said read-only cache in said proxy server device after a disruption to the connection between said proxy server device and said central server device.

17. (currently amended) A proxy server device in a version control system for managing multiple versions of the same file being used in software development, the version control system including a client device and a central server device containing a computer readable repository of at least one set of data for obtaining a plurality of versions of a file, said proxy server device comprising the following:

a) a computer readable medium providing a read-only cache adapted to store copies of said requested version and any currently and previously accessed ones of said plurality of versions obtained from said repository through communication with said central server device; and

b) a processor configured to execute computer readable instructions for running a version provider adapted to provide the requested version of the file to said client device, the version provider being configured to, upon receiving a request for said requested version from said client device, first check the read-only cache for the requested version to provide the requested version from said read-only cache when available and, if the requested version is not available, to request the requested version from said central server device on behalf of said client device.

18. (currently amended) A proxy server device according to claim 17, wherein the read-only cache is configured to store copies of more than one of said plurality of versions of said file requested from said central server device by said client device.

19. (previously presented) A computer-readable medium containing processor instructions for implementing a version control system for managing multiple versions of the

same file to be used in software development, including instructions for the following steps:

a) storing a repository of at least one set of data for obtaining a plurality of versions of a file on a central server configured to control all modifications to said data and to create new versions of said file;

b) establishing communication between said central server and a proxy server including a read-only cache configured to store copies of currently and previously accessed ones of said plurality of versions obtained from said repository through communication between said central server and said proxy server;

c) establishing communication between said proxy server and a client comprising a version manager adapted to generate a request for a copy of a requested version of said file from said repository through said proxy server to reduce network traffic between said central server and said client and to reduce load on said central server; and

d) causing said proxy server to provide said requested version from said read-only cache when available and by requesting said requested version from said central server otherwise.

20. (previously presented) A computer-readable medium according to claim 19, further comprising instructions for the following steps:

maintaining a list of additional proxy servers in the version control system, said additional proxy servers being in addition to said proxy server in communication with said client; and

notifying said additional proxy servers in the list when a change is made to said versioned file.

21. (previously presented) A computer-readable medium according to claim 19, wherein said central server includes an access control system adapted to validate requests received by said central server from said proxy server, said computer-readable medium further comprising instructions for the following step: validating said request received by said central server.

22. (canceled)

23. (canceled)

24. (previously presented) A computer-readable medium according to claim 19, further comprising instructions for the following steps:

said client requesting via said proxy server modifications to said versioned file in said repository; and

said proxy server requesting said central server to make said modification to said versioned file in said repository.

25. (previously presented) A computer-readable medium according to claim 24, further comprising instructions for the following step:

controlling modification of the repository via a checkout mechanism comprising part of said central server.

26. (previously presented) A computer-readable medium according to claim 25, further comprising instructions for the following step:

keeping in the central server a log of changes made to the repository.

27. (previously presented) A computer-readable medium according to claim 26, further comprising instructions for the following step:

using the log to update the proxy server after a disruption to the communication between the proxy server and the central server.

28. (previously presented) A computer-readable medium according to claim 19, further comprising instructions for the following steps:

chaining together a plurality of proxy servers configured to serve a geographic area;

establishing communication between the plurality of chained together proxy servers and one proxy server, said one proxy server being connected to said central server;

establishing communication between said one proxy server and said central server; and

sending updates from the central server for the plurality of chained together proxy servers first to the one proxy server.

29. (currently amended) A version control system according to claim 1, wherein said proxy server device is adapted to operate transparently to users of said at least one client device.